



June 10, 2006

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Sites Area I - January 21, 1999 Administrative Order by Consent (AOC)
Monthly Report May 1 – May 31, 2006**

Dear Mr. Fayoumi,

Enclosed is the Sauget Sites Area I Monthly Report for the May 2006 reporting period. This submittal is in fulfillment of the monthly requirements of Section 2.4 Reporting, of the January 21, 1999 Final Administrative Order by Consent for Sauget Sites Area I, Sauget and Cahokia, Illinois.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven D. Smith".

Steven D. Smith
Project Coordinator

cc: Kevin Turner – USEPA
Tim Gouger - USACE
Sandra Bron - IEPA
Dave Webb - IDPH
Mike Coffey - USF&W
Richard Williams - Solutia
Cathleen Bumb - Solutia
Mayor Frank Bergman - Cahokia, IL
Village of Sauget - c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor R. Sauget - Sauget, IL
L. Glen Kurowski - Monsanto
Linda Tape - Husch & Eppenberger

Sauget Sites Area I - Sauget, Illinois

AOC - EECA / RIFS

Status Report

Date of Report: June 10, 2006
Period Covered: May 1, 2006 - May 31, 2006

Work Performed during the Reporting Period

DNAPL Investigation

Results of field work on a DNAPL investigation that began on May 10, 2004 and was completed on October 30, 2004, were presented in a report submitted to the Agency on January 21, 2005. Based on these results, it was agreed that additional DNAPL investigation was warranted and such investigation began on September 16th and was completed by the end of December 2005. A supplemental DNAPL report was submitted to the Agency on January 6, 2006.

At a meeting held on January 11, 2006, the results of the additional DNAPL investigation were discussed with the Agency. It was noted that the only location at which potentially recoverable quantities of DNAPL were encountered was at BR-I on Site I. The Agency requested that the potential for removal of pooled DNAPL in this well be evaluated. However, due to an apparent obstruction in the well immediately below the bottom of the casing, this obstruction will have to be removed first before pumping can commence. A Work Plan was prepared that describes how the obstruction will be removed and proposes a procedure for attempting any pooled DNAPL recovery. That Work Plan was submitted on March 3, 2006.

At a meeting held on March 8, 2006, the Work Plan was discussed and it was agreed that it would be revised to include a requirement for liquid level monitoring in BR-I for a week prior to any DNAPL removal from the well. The plan was revised to include that requirement and the revised plan was submitted to the Agency for review and approval on April 10, 2006..

EE/CA and RI/FS Report

At a meeting held on July 20, 2005, the Agency indicated its desire to proceed with the source control portion of the Area 1 remedy, if possible, and defer the groundwater

portion of the remedy until a regional groundwater model for the Sauget area has been developed. It was agreed that regular working meetings would be held to define the various elements of a source control remedy for Area 1 so that the EE/CA report could be finalized.

Based on the discussion at this meeting, the source control issues that need to be addressed are the following

- Necessity of leachate collection;
- Risks of potential migration of soil vapors into indoor air; and
- Principal threat material review and analysis.

A number of Technical Memoranda (TM) and drawings have been prepared and submitted to the Agency for review over the last year. These include the following:

- A TM comparing the potential impacts to groundwater from mass flux through the source areas with those from DNAPL dissolution. That TM has been accepted by the Agency and a final version was submitted to the Agency in January 2006. It concluded that the groundwater impacts from leachate flowing through the waste are very small in comparison to those from DNAPL dissolution.
- A TM was submitted on October 20th, 2005, summarizing the risks to a recreational child in Dead Creek. The TM concluded that the risks were well below any level of concern. The Agency has asked that this report be updated to conform to recent EPA guidance changes. Some additional information required to make this change was received from the Agency in the middle of March and the TM was revised and submitted to the Agency on April 26th, 2006.
- A TM was submitted on October 20th, 2006, summarizing the results of the Johnson and Ettinger modeling of potential vapor intrusion into occupied buildings adjacent to the disposal sites. Based on this model, additional soil gas sampling is proposed in the vicinity of these buildings and a Sampling and Analysis Plan was submitted to the Agency on March 3, 2006. The plan was discussed at a meeting held on March 8th and the Agency provided written comments on March 24th. A revised Sampling and Analysis Plan was submitted to the Agency on April 18th. Additional Agency comments were received on May 8th and responses to those will be submitted in the first week of June.
- A TM was submitted on January 4th, 2006 containing the evaluation of the available source characterization data. This evaluation is intended to identify any areas of potential principal threat wastes in the disposal areas. At a meeting on January 11th, it was agreed that the evaluation indicated that no intact drums are present in the disposal areas. This was confirmed by a review of historical aerial photographs and proposed revisions to the TM documenting that fact were submitted to the Agency on April 11th. It was also agreed that data from the On Scene Coordinator's (OSC) files for a removal action carried out by the Agency at

Site G will be reviewed to obtain analytical data to evaluate whether particular areas identified in the report contain principal threat wastes. That review will be carried out as soon as the files are provided by the Agency.

- A Sampling Plan for evaluating the potential for cadmium to leach from vadoze zone soils to groundwater was submitted on October 12th, 2005. It was proposed that soil samples collected in accordance with the plan would be analyzed for pH and extractable cadmium using the TCLP procedure. Groundwater samples would be collected only at those locations where the cadmium concentration in the TCLP extract exceeded the standard for characteristic hazardous waste. It was noted that this procedure was consistent with the TACO regulations. Agency comments were received on February 8,, 2006 and these comments were discussed at a meeting held on March 8th. However, prior to that meeting it was agreed that creek bottom soils in CS-E at Transect T16 will be excavated to remove material containing dieldrin that could possibly leach to groundwater at concentrations in excess of Illinois Class I groundwater standards. Similarly, it was agreed that confirmation samples would be taken in CS-D at Transect T6 and in CS-F at Transect T3 to verify that soils containing dieldrin and beta-BHC respectively have been removed. Those samples were obtained in March and the results confirm that the impacted soils have been removed. Soils at Transect T16 will be excavated as soon as access agreements have been finalized with the Illinois Department of Transportation and with the St. Clair County Highway Department.

At the meeting on March 8th, it was noted that once these soils were removed, the only constituent of concern would be cadmium. It was agreed that the most appropriate way to evaluate the potential for it to leach to groundwater would be to sample and analyze the groundwater immediately downgradient of the transects containing soils with the highest cadmium concentrations, based on the results of the post excavation sampling performed in 2002. A revised sampling plan was submitted to the Agency on May 18th.

- Drawings were submitted and discussed on January 11th, 2006 showing the utilities in the immediate vicinity of the disposal areas, together with the limits of waste boundaries. During this January 11th meeting, it was agreed that the historical aerial photographs prepared by a testifying expert engaged by the Department of Justice (DOJ) would be reviewed to confirm the waste boundaries. Those photographs were reviewed and no new or extended waste disposal areas were identified on the basis of the review. Additional details on the location of sewer mains that run under Queeny Avenue and Falling Springs Road in the vicinity of the disposal sites were added to the existing utility drawings and the revised drawings were distributed at the March 8th meeting.

Attachments

There are no Technical Memoranda or data submitted with this report.

Work Scheduled for Next Reporting Period

Prepare for a meeting with the agencies on a date to be decided and continue to develop a revised EE/CA report.

Submittal Status

The following reports and evaluations are scheduled to be submitted to the Agency prior to, or during, the next EE/CA meeting:

- An additional evaluation of potential areas of principal threat material in the disposal sites. This evaluation will begin as soon as the requested OSC data files for the removal action at Site G are received from the Agency.